

**To:** Wall, Dan[wall.dan@epa.gov]; Way, Steven[way.steven@epa.gov]  
**From:** Schmittiel, Paula  
**Sent:** Thur 8/21/2014 5:37:19 PM  
**Subject:** RE: Request for mine water samples

Think we can get H2O from both the Red & Bonita and the Gold King? What about the Mogul, Grand Mogul and what else? How many sources should tell Jim we can submit?

Paula Schmittiel

Remedial Project Manager

U.S. Environmental Protection Agency

1595 Wynkoop St.

Denver, CO 80202

Office: 303-312-6861

Fax: 303-312-7151

Cell: 720-951-0795

**From:** Wall, Dan  
**Sent:** Thursday, August 21, 2014 11:28 AM  
**To:** Schmittiel, Paula; Way, Steven  
**Subject:** RE: Request for mine water samples

Can't hurt. Right?

**From:** Schmittiel, Paula  
**Sent:** Thursday, August 21, 2014 10:31 AM  
**To:** Wall, Dan; Way, Steven  
**Subject:** FW: Request for mine water samples

Per the email I forwarded earlier this week in regards to AMD at UA. Let me know if you think we can (should) do this with Jim Hanley's assistance.

Paula Schmittiel

Remedial Project Manager

U.S. Environmental Protection Agency

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**From:** Hanley, Jim

**Sent:** Thursday, August 21, 2014 10:28 AM

**To:** Schmittiel, Paula

**Subject:** RE: Request for mine water samples

If you and/or the ARSG are interested, I can pursue it directly with the Montgomery Chemicals person. I think based on my browsing their powerpoint slides that Montgomery wants to bench test liter-size samples of MIW to see how their Boromet solution reacts with water laced with a variety of metal species and whether their test will reveal interferences between various metal precipitations. I don't think they are trying to separate and mine the metal waste streams for economic recovery.

I think the only reasonable way for this to go forward is for Montgomery to send us clean empty plastic bottles and a shipping container with prepaid UPS or FEDEX return shipping labels. Dan or Steve or another field person who visits the site frequently could fill the bottles and return to Denver. I could repackage and ship them out.

What do you think?

James Hanley

Mining Engineer

Office of Environmental Protection and Remediation

US EPA Region 8

1595 Wynkoop Street, EPR-S

Denver, CO 80202-1129

303.312.6725 (office)

[hanley.james@epa.gov](mailto:hanley.james@epa.gov)

**From:** Schmittdiel, Paula

**Sent:** Thursday, August 21, 2014 10:16 AM

**To:** Hanley, Jim

**Subject:** RE: Request for mine water samples

Hey Jim – Can you find out more about this request – what is it that they really want the samples for – i.e., new technology for treatment or to mine the AMD for minerals or??? Also seems like their packaging requirements are unusual.

Paula Schmittdiel

Remedial Project Manager

U.S. Environmental Protection Agency

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**From:** Hanley, Jim

**Sent:** Wednesday, August 20, 2014 12:14 PM

**To:** Costanzi, Frances; Schmitt diel, Paula; Sims, Leslie; Kiefer, Linda; Progeess, Christina; Hernandez, Kathryn; Fiedler, Kerri

**Cc:** Christensen, Stanley; Wharton, Steve; Stites, Rob

**Subject:** FW: Request for mine water samples

Forwarding Shahid's original solicitation for MIW samples for an innovative treatment technology trial. Respond to Shahid if you are interested.

The patented process utilizes **BoroMet 1240** is a stable aqueous solution of sodium borohydride ( $\text{NaBH}_4$ ) and caustic soda (sodium hydroxide,  $\text{NaOH}$ ), used by the printed circuit board, photo processing and metal plating industries to reduce and recover heavy and precious metals from chelated wastewater streams.  $\text{NaBH}_4$  has proven to be very effective in the recovery of copper, nickel, silver, gold, platinum and palladium from various chelated aqueous process and wastewater streams for both environmental and economic reasons.

See [this link](#) if you are interested in knowing more and don't have time for their power point

slides.

James Hanley

Mining Engineer

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[hanley.james@epa.gov](mailto:hanley.james@epa.gov)

**From:** Mahmud, Shahid

**Sent:** Wednesday, August 20, 2014 10:06 AM

**To:** Moreen, Ed; Riley, Gary; Hillenbrand, John; Jenkins, Joy; Hanley, Jim; Carr, Lofton; Baumgarten, Gary; Tomten, Dave

**Subject:** FW: Request for mine water samples

Hi folks,

I am following up on my message I send back in May requesting mine water samples for Montgomery Chemicals. The company has approached OSWER and is seeking support in getting mine influenced water samples to prove out their innovative technology. I would really appreciate you getting back directly to Jim Clements, if you are interested. Please cc me on any correspondence.

Jim Clements

Director of Business Development

Montgomery Chemicals

cell: 603 502 4015

[jclements@montchem.com](mailto:jclements@montchem.com)

Thanks!

Shahid Mahmud  
Team Leader  
EPA Abandoned Mine Lands Team  
703-603-8789

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**From:** Mahmud, Shahid

**Sent:** Thursday, May 15, 2014 10:04 AM

**To:** Adams, Bill; Autrey, Brad; Aycock, Jim; Baumgarten, Gary; Bless, Diana; Byrne, Jim; Carr, Lofton; Chadwick, Dan; Cherepy, Andrea; Conway, Bette; Cozza, Daniel; Cruz, Francisco; Desai, Sheila; Devito, Steve; DiCosmo, Nefertiti; Dixon, Douglas; Doolan, Mark; Egidi, Philip; Ellis, Lisa; Forren, John; Forrest, Sabrina; Geselbracht, Jeanne; Godsey, Cindi; Goodrick, John; Grandinetti, Cami; Grosse, Douglas; Hanley, Jim; Hardy, Michael; Hathaway, Ed; Hauptman, Mel; Hillenbrand, John; Hoffman, Stephen; Hood, Lynne; Housman, Van; Hudiburgh, Gary; Jackson, Brad; Jenkins, Joy; Jessop, Carter; Johnson, Brent; Lavaty, Ann; Lazorchak, Jim; Lensink, Andy; Lesser, Ben; Long, Larry; Low, Seth; Mahmud, Shahid; Mahoney, Michele; Manoyan, Simon; marcy, ken; Mayer, Kevin; Miller, Anna; Miullo, Nat; Progeess, Christina; Purcell, Mark; Riley, Gary; Root, Charlie; Roy, Stephen; Russell, Carol; Teichert, Candice; Teitelbaum, Daniel; Tiago, Joseph; Tomten, Dave; Wilkening, Matt

**Subject:** Request for mine water samples

Hi folks,

I got this message below from Jim Clements at Montgomery Chemicals requesting mine water samples from hardrock mine sites so that he can run them through their treatment process to demonstrate the effectiveness of Montgomery Chemical's treatment technology. Their technology has been very effective in treating mine waters at coal mines in Pennsylvania and West Virginia and they want to determine/demonstrate if their technology can effectively address hardrock mine waters. Three representatives from this company came in to give a presentation (attached) of their technology last year to the Technology Innovation and Field Services Division Director in Headquarters and some NMT members. They noted that they would get back to us and are now asking if folks are interested in volunteering to send samples to this company. Please see Jim Clements message below on volume, shipping procedures and location. Let me know if you are interested so that I can let Jim know. Thanks!

Shahid Mahmud

Team Leader, EPA Abandoned Mine Lands Team

703-603-8789

[mahmud.shahid@epa.gov](mailto:mahmud.shahid@epa.gov)

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Hi Shahid.

It would be great to get some 1 quart or so samples of water. Water is not a hazardous material, so anyway someone wants to ship it is fine, providing they pack it in an absorbant in case it leaks. A lot of folks use water or soda bottles and put them into a bag of vermiculate or kitty litter.

Besides the iron, I'm very interested in seeing how we can remove the 'odd' metals. We've been very fortunate with Manganese, and can probably remove the

strontium type metals. I know we can do nickel...it's just a matter of seeing if any nickel or copper is there.

My shipping address is

Montgomery Chemical,

c/o Jim Clements

319 Middle Rd.

Brentwood NH 03833.